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(71)Applicant: MITSUBISHI ELECTRIC CORP

(72)Inventor: KURATA TETSUYUKI
TSUNODA MAKOTO
HIZUKA YUJI
ANDO TORAHICO

(54)ORGANIC CONTINUOUS THIN FILM COLOR
READING ELEMENT

(57)Abstract:

PURPOSE: To effectively remove components of three RGB colors by the area of one element by preferably combining P-or N-type property of organic colorant and the large or small working function of an electrode material to form an anisotropic junction at the side in which the lights of the organic colorant layers are incident.

CONSTITUTION: Electrodes and organic colorant layers are alternately laminated, and lights are incident from the side of a first electrode 1. The first@third organic colorant layers 2, 4, 6 are, for example, of P-, N-and P-types, and have photovoltaic spectra which are not superposed. The materials of the first and third electrodes 1, 5 are conductive and have small working functions for forming an anisotropic junction with the P-type material and an isotropic junction with the N-type material. The materials of the second and fourth electrodes 3, 7 are conductive and have

large working functions for forming an isotropic junction with the P-type material and an anisotropic junction with the N-type material. Photosensitive wavelength bands are elected for three colors R, G, B. A plurality of elements are aligned to read one line color image by an RGB system.

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